

U.S. Application No. 10/578,851 -- 5

### REMARKS

Claims 11 – 20 remain in this application. Claims 11 and 18 have been amended. Reconsideration of this application in view of the amendments noted is respectfully requested.

Claim 11 has been amended to include the limitations of a grease collecting means arranged inside the cell for collecting grease separated by the separator. Support for this limitation can be found in paragraph [0022] of the application publication (2007/0084459). Further, claim 11 has been amended to include the limitations that the cell is wider than the exhaust-air duct and forms a mixing chamber for mixing the exhaust air and the additional non-exhaust air and for reducing the air velocity in the cell upstream of the separator. Support for these limitations can be found in paragraphs [0024] and [0025] of the application publication and claim 18. Claim 18 has therefore been amended to be consistent with the amendments to claim 11.

Claim 11 has also been amended to change the first recitation of “the exhaust-air duct” to --an exhaust-air duct--.

In the final Office Action dated April 1, 2010, claims 11 – 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor (U.S. Patent No. 4, 407,266) in view of Hepner (U.S. Patent No. 4,235,220). Applicant respectfully traverses this rejection.

Applicant maintains all of its previous arguments with respect to the patentability of the claims over any possible combination of Molitor and Hepner, including the arguments made in response to the final Office Action of April 1, 2010. Molitor fails to disclose or fairly suggest a cell separate from the hood, an intake-air connection separate from the hood, and cooling of a separator. And Hepner fails to remedy these deficiencies.

Furthermore, Molitor and Hepner, either alone or in any possible combination, do not disclose or fairly suggest a cell that is wider than the exhaust-air duct and forms a mixing chamber for mixing exhaust air and additional non-exhaust air and for reducing the air velocity in the cell upstream of a separator, and a grease collecting means arranged inside the cell for collecting grease separated by the separator, as claim 11 now requires.

U.S. Application No. 10/578,851 -- 6

In this regard, the structural feature of the mixing chamber is essential for grease separation. In the mixing chamber, the air velocity drops and the additional non-exhaust air creates turbulence in the exhaust air (for example, see paragraphs [0024] and [0025] of the application publication). The additional non-exhaust air and the slow air velocity causes the small particles to form droplets (for example, see paragraphs [0020] and [0021] of the application publication). Thus, droplets are formed that are large enough to be effectively removed by a mechanical separator. It is also noted that the present invention includes a separator rather than a filter. The separator forms droplets which fall/drain downwards. If the invention instead included a filter, it would quickly become full of grease. The presence of the separator rather than a filter is also a structural difference of the present invention in comparison to Molitor and Hepner. And the now claimed structural feature of the grease collecting means is significant because the separator so effectively separates grease from the air flow.

Additionally, in response to the Advisory Action, Molitor does not function in the same way as the present invention. As stated in previous responses, Molitor discloses heating of the mist eliminator E. Molitor states that "when the cooking equipment is producing a maximum temperature at control thermometer 42, the damper 68 will be fully closed" (column 6, lines 25 - 27) and "thus, when the exhaust and intake fans are first turned on, which is necessary prior to starting the cooking equipment, the controls are set so that the damper 68 is fully open and the amount of bypass air flowing through duct D is at a maximum" (column 6, lines 18 - 22). This principle is also mentioned, for example, in claims 1 - 4 of Molitor (see "controlling inversely"). This means that Molitor is not capable of performing the intended use of the present invention, because the inversely controlled damper of Molitor prohibits it.

Also, one of ordinary skill in the art could not combine Molitor and Hepner, and even if the two references are possibly combinable, the combination would not result in the present invention. Molitor only heats (when necessary) and the heating takes place downstream from all of the filters. There is no cooling in Molitor. And Hepner does not use any intake air (i.e., there is no cooling of the exhaust air). The separation of grease is then

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JUL 29 2010

U.S. Application No. 10/578,851 -- 7

impossible in Molitor and Hepner, because the filters are still very hot when grease is brought into contact with the filters. Also, in Molitor and Hepner the grease is primarily taken out in the hood (see the water of Molitor and the primary grease filter 52 of Hepner). Further, mist eliminator E of Molitor and secondary grease filter 56 of Hepner are filters, not separators. A filter soaks up grease, but does not separate it. And in any event, the combination of Molitor and Hepner would not perform the intended use of the present invention. As stated above, when the apparatus of Molitor is in use, i.e. heated up for cooking, the damper 68 is closed. Then there would be no air flow in the duct D, and thus there would not be any temperature controlled stream through the additional filter.

For all of these reasons, claim 11 is patentable over any possible combination of Molitor and Hepner. Claims 12 – 20, depending from claim 11, are also patentable over Molitor and Hepner. Accordingly, applicant respectfully requests that the Section 103(a) rejection of claims 11 – 20 as being unpatentable over Molitor in view of Hepner be withdrawn.

A Request for Continued Examination (RCE) and a PTO-2038 authorizing payment in the amount of \$405.00 to cover the fee under 37 CFR 1.17(e) are included with this response.

A Petition For A One-Month Extension Of Time and a PTO-2038 authorizing payment in the amount of \$65.00 to cover the fee under 37 CFR 1.17(a)(1) are included with this response.

This amendment and request for reconsideration is felt to be fully responsive to the comments and suggestions of the examiner and to place this application in condition for allowance. Favorable action is requested.

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JUL 29 2010

U.S. Application No. 10/578,851 -- 8

Respectfully submitted,

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